

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DENNIS E. VOGEL

Appeal No. 95-3353
Application No. 07/855,799¹

ON BRIEF

Before PAK, OWENS, and KRATZ, Administrative Patent Judges.
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claims 3 through 11, and 20 through 22, which are all of the claims pending in this application. Separate amendments after final rejection filed on April 26, 1994 and August 1, 1994 are entered as advised in a communication

¹ Application for patent filed March 23, 1992.

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mailed May 6, 1994 and in the examiner's answer mailed
September 13, 1994.

BACKGROUND

The appellant's invention relates to an imageable element comprising a substrate coated with a layer including an azido methyl substituted polyether and a radiation absorber. An understanding of the invention can be derived from a reading of exemplary claim 8, which is reproduced below.

8. An imageable element comprising a substrate having coated on at least one major surface thereof a layer comprising a polymer containing pendent azido groups, wherein said polymer has a repeating unit having the formula
$$\begin{array}{c} \text{---CH}_2\text{---CH---O---} \\ | \\ \text{CH}_2\text{N}_3 \end{array}$$
, said layer being

capable of being imaged upon exposure to electromagnetic radiation to form either a positive or a negative relief image without the need for a solvent development step, said layer further comprising a radiation absorber.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Edwin J. Vandenberg (Vandenberg) 3,645,917 Feb. 29,
1972

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Aotani et al. (Aotani)

4,356,247

Oct. 26,

1982

Claims 3-11 and 20-22 stand rejected under 35 U.S.C. § 103 as being unpatentable over Vandenberg in view of Aotani.

OPINION

We have carefully considered all the evidence of record, including the specification, claims, the applied prior art, and the respective positions articulated by the appellant and the examiner in the briefs and answers thereto. As a result, we agree with appellant that the combined prior art references as applied by the examiner do not render the subject matter defined by the claims prima facie obvious. Accordingly, we shall not sustain the examiner's rejection for the reasons as follows.

Vandenberg discloses polyethers that contain pendent azidomethyl groups and teaches that these polymers are crosslinkable by heat, photolysis, and the addition of polyfunctional dipolarophiles (column 3, lines 39-47). Patentee also suggests that the disclosed polyethers have diverse utilities including use "as coatings of improved adhesion for substrates such as metal, glass, textiles, paper, wood..." (column 3, lines 47-54).

Aotani is concerned with furnishing a "highly sensitive light-sensitive composition containing a sensitizer which does not crystallize in the light sensitive layer during preservation." The composition is taught to be "useful for light-sensitive layers of ... printing plates, photoresists, etc." (column 1, lines 12-15). Aotani suggests selecting a polymer "having photo-crosslinkable unsaturated bonds which can be sensitized by the sensitizers of this invention..." (column 6, lines 15-21). Among a variety of polymers disclosed by patentees as useful with the sensitizer are polymers containing azido group(s) such as those disclosed at columns 6-8 of the patent. Aotani indicates that a binder, plasticizer, and a dye or pigment may be additionally employed in preparing the light-sensitive composition (column 8, lines 52-61). Carbon black is included in a disclosed list of materials from which the dye or pigment may be selected (column 9, lines 16-20).

The examiner acknowledges that Vandenberg does not disclose the use of polyetherazides for forming an imageable element as claimed by appellant (answer, page 3). Moreover, the examiner acknowledges that Aotani does not disclose the

use of polyetherazides in conjunction with patentees' disclosed sensitizer in forming imageable elements (answer, page 4). Rather, the examiner relies on the combination of the teachings of Vandenberg and Aotani as evidence of obviousness in attempting to show that the claimed invention would have been prima facie obvious. According to the examiner, it would have been obvious to one of ordinary skill in the art to select the polyether containing pendent azidomethyl groups of Vandenberg as the polymer to be used in the composition of Aotani for use together with the sensitizer in forming an imageable element as claimed (answer, pages 4 and 5, carryover paragraph). The examiner reasons that adequate motivation for such a combination can be found in the exemplary disclosure of Aotani (column 7, lines 33-37) indicating the use of polymers having photo-crosslinkable azido groups and the "...disclosed photolytic property of the polyetherazides" of Vandenberg (answer, page 5). We disagree.

The examiner has not pointed to any disclosure of either applied reference which indicates that polyethers that contain pendent azidomethyl groups would have been considered as useful with the disclosed sensitizer of Aotani. In this

regard, we note that Aotani clearly teaches that the azido group containing polymer is selected from those which would be "...sensitized by the sensitizers of this invention" (column 7, lines 33-37 and column 2, lines 3-34).

We further observe that Aotani suggests numerous examples of other polymers that could be used with the sensitizer in Aotani's inventive composition and teaches the use of non-azide containing polymers as well as azido group containing polymers such as aromatic azide compounds wherein an azido group is directly bonded to an aromatic ring (column 7, line 33 to column 8, line 5). Thus, we find ourselves in agreement with appellant (brief, page 10) that the applied prior art would not have suggested the examiner's proposed combination. In our view, the reference combination as proposed by the examiner would appear to destroy the inventive concept of Aotani which requires that the polymer be selected from among those disclosed by Aotani based on the compatibility thereof with the sensitizer compound to be used therewith. See Ex parte Hartmann 186 USPQ 366, 367 (Bd. App. 1974). Accordingly, we cannot sustain this rejection based on the present record.

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CONCLUSION

To summarize, the decision of the examiner to reject
claims 3-11 and 20-22 under 35 U.S.C. § 103 is reversed.

REVERSED

	CHUNG K. PAK)	
	Administrative Patent Judge)	
)	
)	
)	
	TERRY J. OWENS)	BOARD OF
PATENT	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
	PETER F. KRATZ)	
	Administrative Patent Judge)	

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APJ KRATZ

APJ OWENS

APJ PAK

DECISION: **REVERSED**

Prepared By: TINA

DRAFT TYPED: 20 Mar 00

FINAL TYPED: